Math 53 Discussion

Quiz on Monday: Review sections 15.5, 15.7, 15.8

Practice Problems: 15.9, spherical coordinates

1) Evaluate $\int \int \int_E z \, dV$ where E lies between the spheres $x^2 + y^2 + z^2 = 1$ and $x^2 + y^2 + z^2 = 4$ in the first octant.

2) Find the volume of the solid that lies above the cone $\phi = \pi/3$ and below the sphere $\rho = 4\cos\phi$.

1) $\frac{15\pi}{16}$.   2) 10π